

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1			Date:	3/24/2023	H ₂ puffing with Air discharge													
2			Run description:	FRC/RMFO														
3			Base pressures: SEC IG (T)	1.0007														
4			CC IG (T)	1.008														
5			FEC IG (T)	3e-5														
6			SEC Slow Baratron (T)	1.0007														
7			CC Slow Baratron (T)	1.008														
8			RMF frequency & phase	1.5 kHz														
9			Magnet configuration & PS	4x8 + 8x4 coils; BB PS & 2 Magna powers inside 8; eight BN-covered FCs Recentered 4-turn MC coil														
10			RMF system	SRS -> duty factor limiters -> AR100LM9 -> 8KD -> 200 kW home made antennas: 2-turn; cable: RG-226, 60" long														
11			Time	10:30	10:55	11:14	11:37	11:37	11:41	11:49	12:00	12:10	12:16	12:22	12:27	12:30	12:31	12:35
12	Magnapower	L-2 Coils I (A)	201	201	200	203	200	200	200	200	200	255	254					301
13	Big Blue	L-2 Coils I (A)	190	190	190	190	189	190	190	190	190	257	256					305
14		Nozzle coils I (A)	101	101	100	100	100	100	100	100	100	100	100					100
15		SEC IG (T)	1.0009	1.0008	1.0009	1.0009	1.0009	1.0009	1.0009	1.0009	1.0009	1.0010	1.0009					
16		SEC Slow Baratron (T)			return													
17		CC IG (T)			1.5													
18		CC slow Baratron (T)	1.445	1.431	1.404	1.412	1.412	1.419	1.42				1.452	1.427				
19		FEC IG (T)	1.3	1.3	1.2	1.3	1.2	1.2	1.23				1.2	1.2				
20		FEC FB (T)	2-5	2-5	2-5	2-5	2-5	2-5	2-5				2-5	2-5				
21		Ta paddle voltage			still		still	still	still									
22		Main valve	C		pure Ar		still pure Ar	still pure Ar	still pure Ar									
23		Navigator valve	0		Ar		Ar	Ar	Ar									
24		End turbo valve	0															
25		Gases/feed location/sccm	Ar/CC															
26		PV-10 (V)	scan the pulse															
27		Pulse A to/Δt	checked															
28		Pulse B to/Δt	gas on at V=82 Volts															
29		CC Pressure (mT)	scan for Δt=1/2 μs															
30		(Fast Baratron)																
31		170 GHz dia (mV)/IM freq	changed DSO trigger															
32	Glassman	High Voltage (kV)	146	146	146	146	142	142	142									
33		RMFO system main SRS		1.26	1.30		1.3	1.5	1.6	1.65	1.65							
34		Pulse width (ms)		5	5		5	5	5									
35		Time between pulses (s)		1	1		1	1	1									
36		Frequency: Center(MHz)/Span(KHz)		1.7993	1.7993		1.7993	1.7993										
37		Phase °		50	91		93	97	100	101	102							
38		Pa		8	10		10	20	24	25								
39		Pf (kW)		25	32		34	62	75	80								
40		φM or % reflected																
41		FEC probe	1.12		1.13		1.13	1.13	1.13									
42		CC Probe	1.10		1.10		1.10	1.10	1.10									
43		Helicon Pf/Pr			2167W		2167W	2167W	2167W									
44		Helicon (SRS/mod)	11		11		11	11	11									
45		Comments/changes:	for Δφ = π/2, ne = 2.1e12 cm ⁻³ for 16-cm dia plasma															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1			Date:	3/24/2027															
2			Run description:	FRC/RMFO															
3			Base pressures:	SEC IG (T)															
4				CC IG (T)															
5				FEC IG (T)															
6				SEC Slow Baratron (T)															
7				CC Slow Baratron (T)															
8				RMF frequency & phase															
9			Magnet configuration & PS	4x8 + 8x4 coils; BB PS & 2 Magna powers inside 8; eight BN-covered FCs						Recentered 4-turn MC coil									
10			RMF system	SRS -> duty factor limiters -> AR100LM9 -> 8KD -> 200 kW home made						antennas: 2-turn; cable: RG-226, 60" long									
11			Time	12:38	12:43	12:44													
12		Magnapower	L-2 Coils I (A)	300															
13		Big Blue	L-2 Coils I (A)	303															
14			Nozzle coils I (A)	100															
15			SEC IG (T)																
16			SEC Slow Baratron (T)																
17			CC IG (T)																
18			CC slow Baratron (T)	c.448															
19			FEC IG (T)																
20			FEC FB (T)																
21			Ta paddle voltage																
22			Main valve																
23			Navigator valve																
24			End turbo valve																
25			Gases/feed location/sccm																
26			PV-10 (V)																
27			Pulse A to/Δt																
28			Pulse B to/Δt																
29			CC Pressure (mT)	Pb															
30			(Fast Baratron)	Pa															
31			170 GHz	dia (mV)/1M freq															
32			Glassman	High Voltage (kV)															
33			RMFO system	main SRS															
34				Pulse width (ms)															
35				Time between pulses (s)															
36				Frequency: Center(MHz)/Span(KHz)															
37				Phase °															
38				Pa															
39				Pf (kW)															
40				ΦM or % reflected															
41				FEC probe															
42				CC Probe															
43				Helicon Pf/Pr															
44				Helicon (SRS/mod)															
45			Comments/changes:	for Δφ = π/2, ne = 2.1e12 cm-3 for 16-cm dia plasma															